

# Equinox 625 kW CE

Peak Efficiency of 98.5%

98% CEC Weighted Efficiency

Next-Generation Modular Design

Wide Thermal Operating Range

## Streamlined Design

With all components encased in a single enclosure, Equinox PV inverters are easy to install, operate and maintain.

## Rugged Design

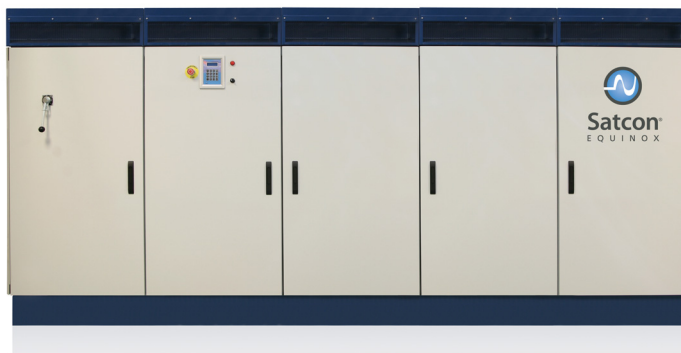
- Wide thermal operating range: -20° C to 50° C
- Support for external temperatures as low as -40° C with optional Winter climate package
- Designed for optimal performance in Desert, Tropical, and Winter climates

## Industrial-Grade Engineering

- Fully outdoor solution (no concrete station required)
- IP54 enclosure for maximum protection and longevity
- Double wall enclosure eliminates external air circulation from inside inverter
- Solar shields attached to exterior of enclosure dissipate solar radiation, reduce heat buildup

## Advanced Utility-Ready Features

- Remote control of real and reactive power
- Low-voltage ride through
- Power factor control
- Simplified grid interconnection
- Fast communications
- Easily integrated into SCADA systems through standardized communication interfaces



## Profitable PV Power

The Satcon™ Equinox™ 625 kW PV inverter has a significant impact on the profitability dynamic of large-scale solar power systems. With its unparalleled system intelligence, next-generation Edge™ MPPT technology, and industrial-grade engineering, the Equinox 625 kW inverter maximizes system uptime and power production, even in the harshest environments.

## Rugged Design

Equinox features a IP54 enclosure, ensuring protection and longevity. It features a wide thermal operating range from -20° C to 50° C. With the optional Winter climate package, it supports temperatures as low as -40° C with an optional heater.

## Industrial-Grade Engineering

As fully outdoor solution, Equinox does not require an external climate-controlled enclosure or concrete station, reducing both cost and space requirements. Equinox's advanced double wall enclosure cooling system eliminates the need for external air circulation inside the inverter, reducing contaminants and improving cooling performance.

## Increased PV Plant Yield

Equinox, Satcon's next-generation inverter design, features best-in-class peak efficiency of 98.5%\* to provide you with the highest levels of system performance and uptime.

## Advanced Utility-Ready Features

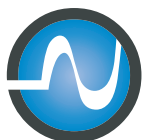
Equinox's advanced utility-ready features enable remote control of real and reactive power, low-voltage ride through and power factor control. Equinox provides for simplified grid interconnection and supports fast communications, allowing it to be easily integrated into SCADA systems through standardized communication interfaces.

## Commercial and Utility-Scale

Many of the world's largest solar power installations depend on Satcon Equinox PV inverters to provide efficient and stable power—even in the harshest climates.

## Proven Performance

The proven leader in solar inverter solutions for commercial installations, Satcon sets the standards for efficient large-scale power conversion.



# Satcon®

Utility-Ready Solar Inverters

# Equinox 625 kW CE

## Streamlined Design

With all components encased in a single enclosure, Equinox is easy to install, operate and maintain.

## Outdoor Construction

- Rugged cabinet for all environments
- Dual cooling fans

## Easy Maintenance

- Modular components make service efficient
- Convenient access to all components
- Large in-floor cable gland plates make installation of DC and AC cables easy
- Customizable for cable glands of customer's choice
- Integrated DC two-pole disconnect switch isolates the inverter (with the exception of the GFDI circuit) from the photovoltaic power system to allow inspection and maintenance

## Proven Reliability

Rugged and reliable, Equinox is engineered from the ground up to meet the demands of large-scale installations.

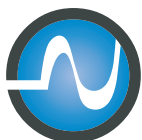
## Safety

- Built-in DC and AC disconnect switches
- Protective covers over exposed power connections

## Output Transformer

- Provides galvanic isolation
- Matches the output voltage of the PV inverter to the grid

Equinox 625 kW Specifications		CE
<b>Input Parameters</b>		
Input Voltage Range		525-850 VDC
Maximum Array Input Voltage		1000 VDC
Maximum Input Current <sup>1</sup>		1240 ADC
PV Array Configuration	Floating	•
	Negative Ground	•
	Positive Ground	•
<b>DC Input Combiner Options</b>		
Combiner Bus Bar Inputs		24
Number of Inputs and Fuses	20 x 100A	○
	18 x 125A	○
	16 x 160A	○
	12 x 200A	○
	10 x 250A	○
	8 x 315A	○
	6 x 400A	○
<b>Transformer</b>		
Integrated Transformer		No
<b>Efficiency</b>		
Maximum <sup>2</sup>		98.5%*
European – Eta		97.5%
CEC		98.0%*
<b>Output Parameters</b>		
Nominal Power		625 kW
Nominal Output Voltage		320 VAC
Output Voltage Range, [-12% / 10%]		282-352 VAC
Maximum Output Current/Phase		1127 A
Standby Consumptions (tare losses including control power and aux.)		170 W*
Nominal Output Frequency, 3 phase		50 Hz
Harmonic Distortion		<3% THD
Power Factor, Full Load		>0,99
Dynamic Power Factor Control		+/- 0.8
Power Curtailment		0-100%, 1% steps via ModBus
<b>Environment</b>		
Operating Temperature Range (Nominal Power)		-20° C to +50° C
Storage Temperature Range		-30° C to +70° C
Cooling		Forced Air
Elevation (Maximum) <sup>3</sup>		4000 m
Noise Level (Distance of 3 m)		<65 dB(A)
Relative Humidity (Non-Condensing)		15 - 90 %



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Utility-Ready Solar Inverters

Equinox 625 kW Specifications		CE
<b>Enclosure</b>		
Dimensions (H x L x D)	211 x 452 <sup>4</sup> x 84 cm	
Weight <sup>5</sup>	3152 kg	
Finish	RAL 7035	
Hood and Base Trim Finish	RAL 5001	
Protection Rating	IP54	
<b>Warranty and Services</b>		
Five Year Warranty	●	
Extended Warranty (1 and 5 year increments)	○	
Preventative Maintenance Agreement	○	
Uptime Guarantee <sup>6</sup>	○	
Design Services	○	
APEX Project Management	○	
<b>Communication and Monitoring</b>		
Communication Interface	Modbus RS485	●
	Modbus TCP/IP	●
Monitoring	PV View Plus	○
	PV Zone	○
	Third-Party Compatibility	●
<b>Regulations and Standards Conformity</b>		
CE Certification (IEC 62109-1, EN 61000-6-2, EN 61000-6-4, DIN VDE 0126-14-1)	●	

- Standard / Standard Option
- Optional

NOTE: All specifications are subject to change.

\* Preliminary data.

<sup>1</sup> Input current calculated at nominal line voltage, full output power, minimum DC voltage.

<sup>2</sup> Calculated without auxiliary power.

<sup>3</sup> Operation above 1000 m results in a decrease in the maximum ambient temperature for full power operation. For each additional 1000 m in elevation, there is approximately a 2.5° C decrease in the maximum ambient temperature for full power operation.

<sup>4</sup> 507 cm with Floating option fuse kit. For some models. Information available under request.

<sup>5</sup> Dependent on options selected.

<sup>6</sup> Requires Preventative Maintenance Agreement.

### Energy Equity Protection

Satcon provides a wide range of optional value-added services to protect your investment across the entire lifecycle of your project.

### Design Services

Satcon's Design Services organization can guide you through all phases of project development using our broad experience and engineering skills.

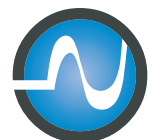
### APEX Project Management

Satcon APEX Project Management ensure that your project comes in on time and on budget.

- Project planning
- Logistics
- Project supervision
- Mitigating risk, maximizing ROI

### Service and Warranties

- Help desk
- Support services
- Extended warranty
- Preventative maintenance plans
- 99% Uptime Guarantee



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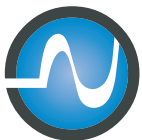
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